

FIG. 1

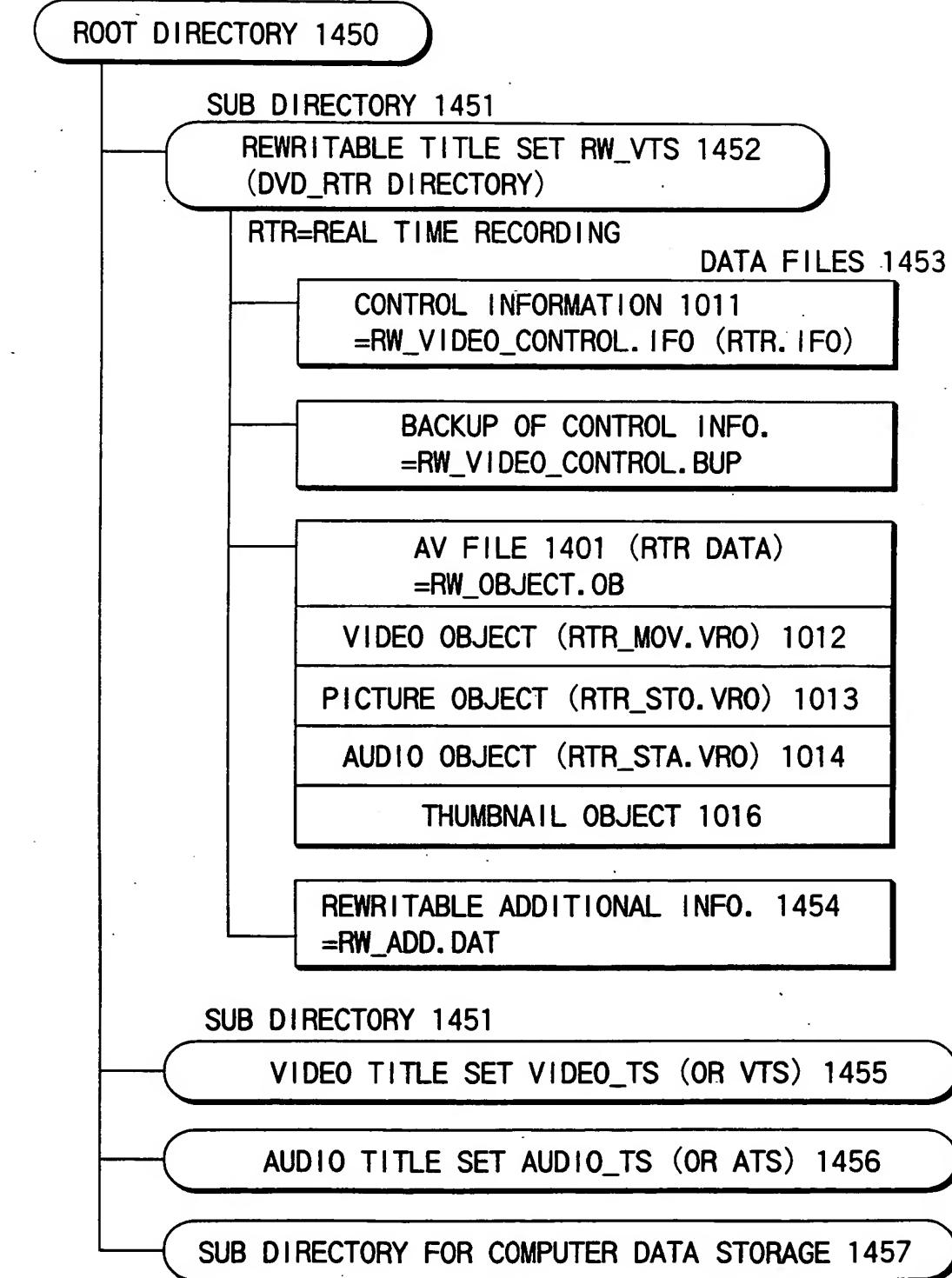


FIG. 2

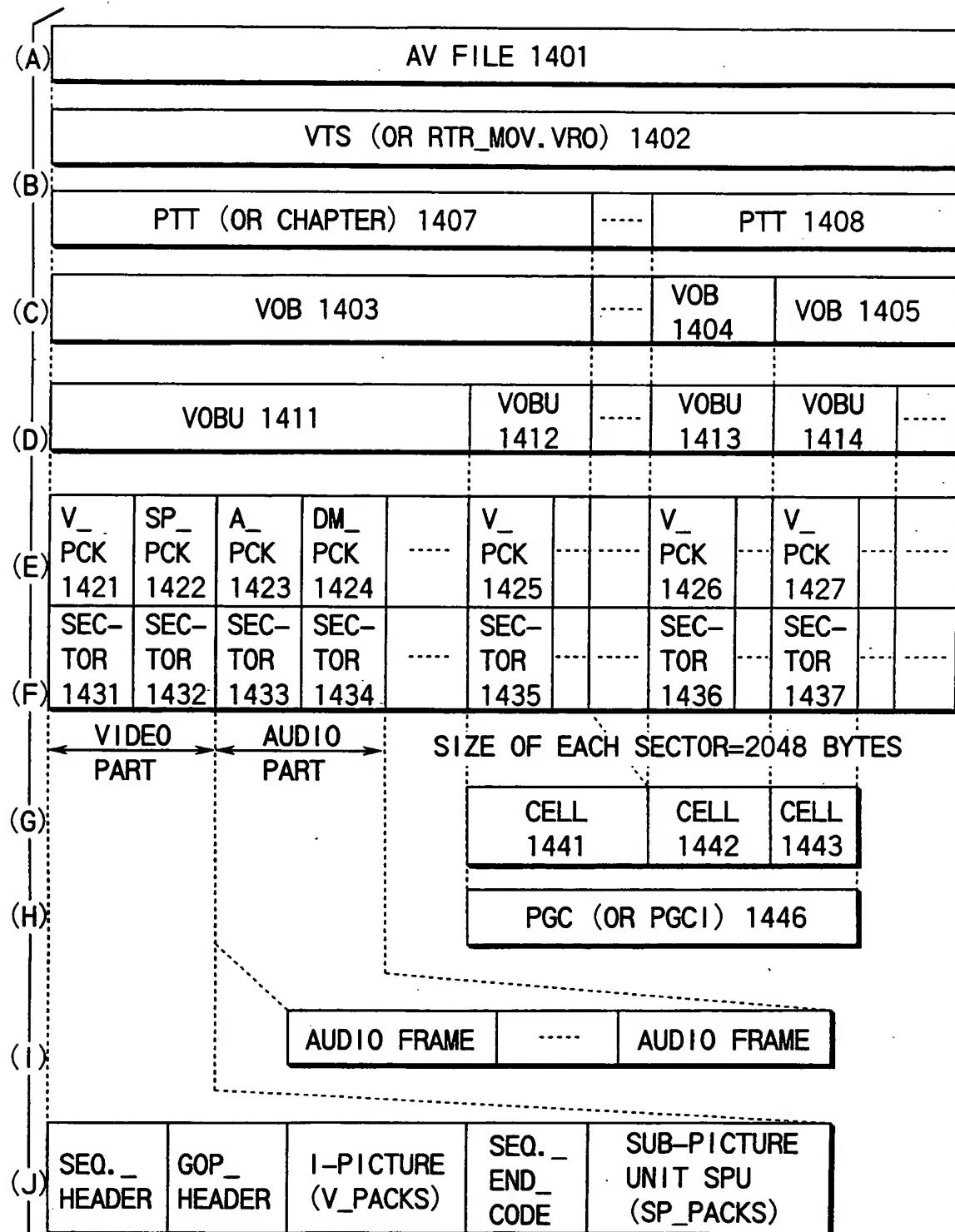


FIG. 3

AV FILE 1401					
VOB #3 (1) 1463	VOB #1 1461	VOB #3 (2) 1464	VOB #2 1462	UNRECORDED AREA 1460	VOB #3 (3) 1465
EXTENT # γ 1473	EXTENT # α 1471	EXTENT # δ 1474	EXTENT # β 1472	EXTENT # ζ 1470	EXTENT # ϵ 1475
					LSNg
					LSNf+1
					LSNf
					LSNe+1
					LSNe
					LSNd+1
					LSNd
					LSNc+1
					LSNc
					LSNb+2
					LSNb+1
					LSNb
					LSNa+2
					LSNa+1

←SMALLER LOGICAL SECTOR NUMBER (LSN)
 ←INNER SIDE OF OPTICAL DISC 1001

→LARGER LOGICAL SECTOR NUMBER (LSN)
 →OUTER SIDE OF OPTICAL DISC 1001→

FIG. 4

CONTENTS OF
ALLOCATION
MAP TABLE
1105

DISTRIBUTION
INFORMATION OF
POSITIONS OF
UNRECORDED
AREA 1621

DISTRIBUTION
INFORMATION OF
POSITIONS OF
RECORDED DATA
AS TO VOB #1
1622

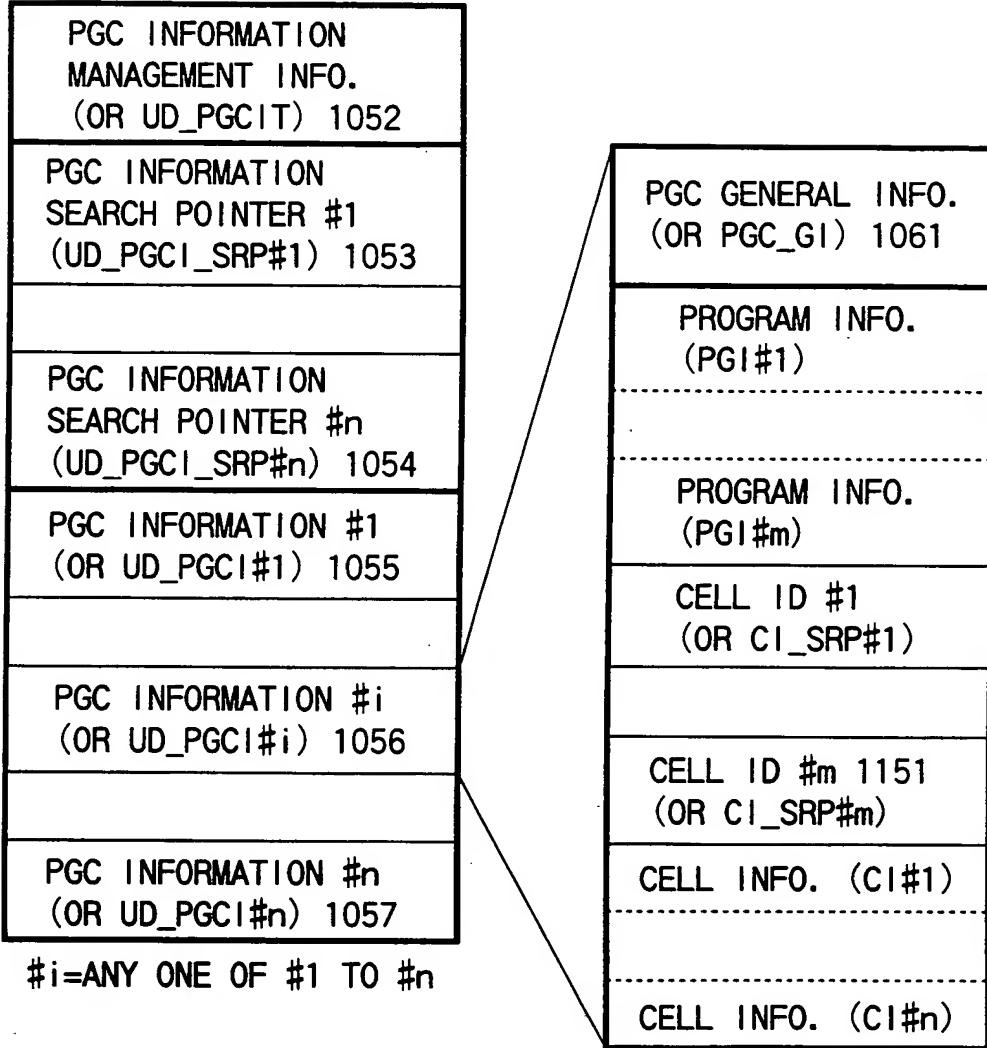
DISTRIBUTION
INFORMATION OF
POSITIONS OF
RECORDED DATA
AS TO VOB #2
1623

DISTRIBUTION
INFORMATION OF
POSITIONS OF
RECORDED DATA
AS TO VOB #3
1624

NUMBER OF EXTENTS IN UNRECORDED AREA 1601	1
1ST ADR. (LSN) OF 1ST EXTENT IN UNRECORDED AREA 1606	e-a
SIZE (SECTORS) OF 1ST EXTENT IN UNRECORDED AREA 1614	f-e
NUMBER OF EXTENTS IN VOB #1 1602	1
1ST ADR. (LSN) OF 1ST EXTENT IN VOB #1 1607	b-a
SIZE (SECTORS) OF 1ST EXTENT IN VOB #1 1615	c-b
NUMBER OF EXTENTS IN VOB #2 1603	1
1ST ADR. (LSN) OF 1ST EXTENT IN VOB #2 1608	d-a
SIZE (SECTORS) OF 1ST EXTENT IN VOB #2 1616	e-d
NUMBER OF EXTENTS IN VOB #3 1604	3
1ST ADR. (LSN) OF 1ST EXTENT IN VOB #3 1609	1
SIZE (SECTORS) OF 1ST EXTENT IN VOB #3 1617	b-a
1ST ADR. (LSN) OF 2ND EXTENT IN VOB #3 1610	c-a
SIZE (SECTORS) OF 2ND EXTENT IN VOB #3 1618	d-c
1ST ADR. (LSN) OF 3RD EXTENT IN VOB #3 1611	f-a
SIZE (SECTORS) OF 3RD EXTENT IN VOB #3 1619	g-f

FIG. 5

PGC CONTROL INFO. (OR UD_PGCIT) 1103



- *1> PGC INFORMATION (OR UD_PGC1) CAN DEFINE A GROUP OF ONE OR MORE PROGRAMS;
- *2> EACH PROGRAM CAN BE FORMED OF ONE OR MORE CELLS;
- *3> EACH CELL CAN BE SPECIFIED BY CELL ID (OR CI_SRP);
- *4> EACH CELL ID (OR CI_SRP) CAN INDICATE POSITION (OR START ADDRESS) OF CELL INFORMATION (OR CI);
- *5> EACH CELL INFORMATION (OR CI) CAN DETERMINE START TIME AND END TIME OF PRESENTATION OF CELL

FIG. 6

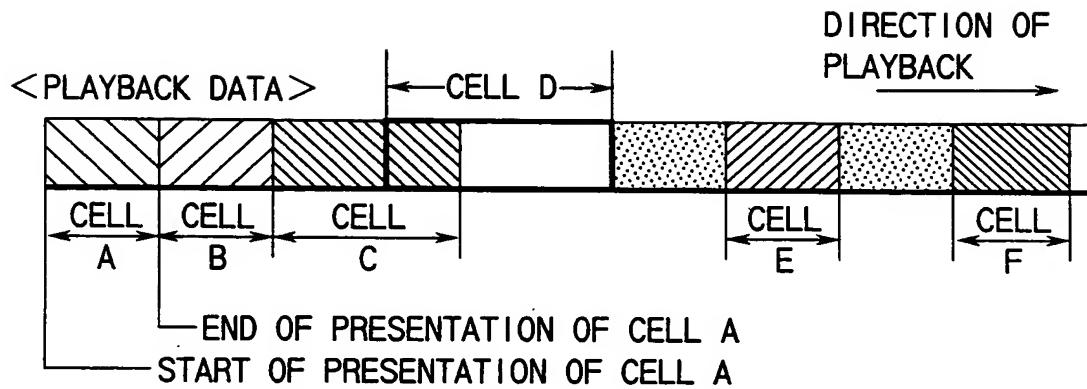


FIG. 7A

PGC INFORMATION (PGCI)

PGC#1 1081		PGC#2 1082		PGC#3 1083	
NUMBER OF CELLS=3		NUMBER OF CELLS=3		NUMBER OF CELLS=5	
#1	CELL A	#1	CELL D	#1	CELL E
#2	CELL B	#2	CELL E	#2	CELL A
#3	CELL C	#3	CELL F	#3	CELL D
—	—	—	—	#4	CELL B
—	—	—	—	#5	CELL E
CELL ID	CELL INFO.	CELL ID	CELL INFO.	CELL ID	CELL INFO.
CI_SRP #m=3	CI #n=3	CI_SRP #m=3	CI #n=3	CI_SRP #m = 5	CI #n=4

FIG. 7B

2006T20"X225X200T

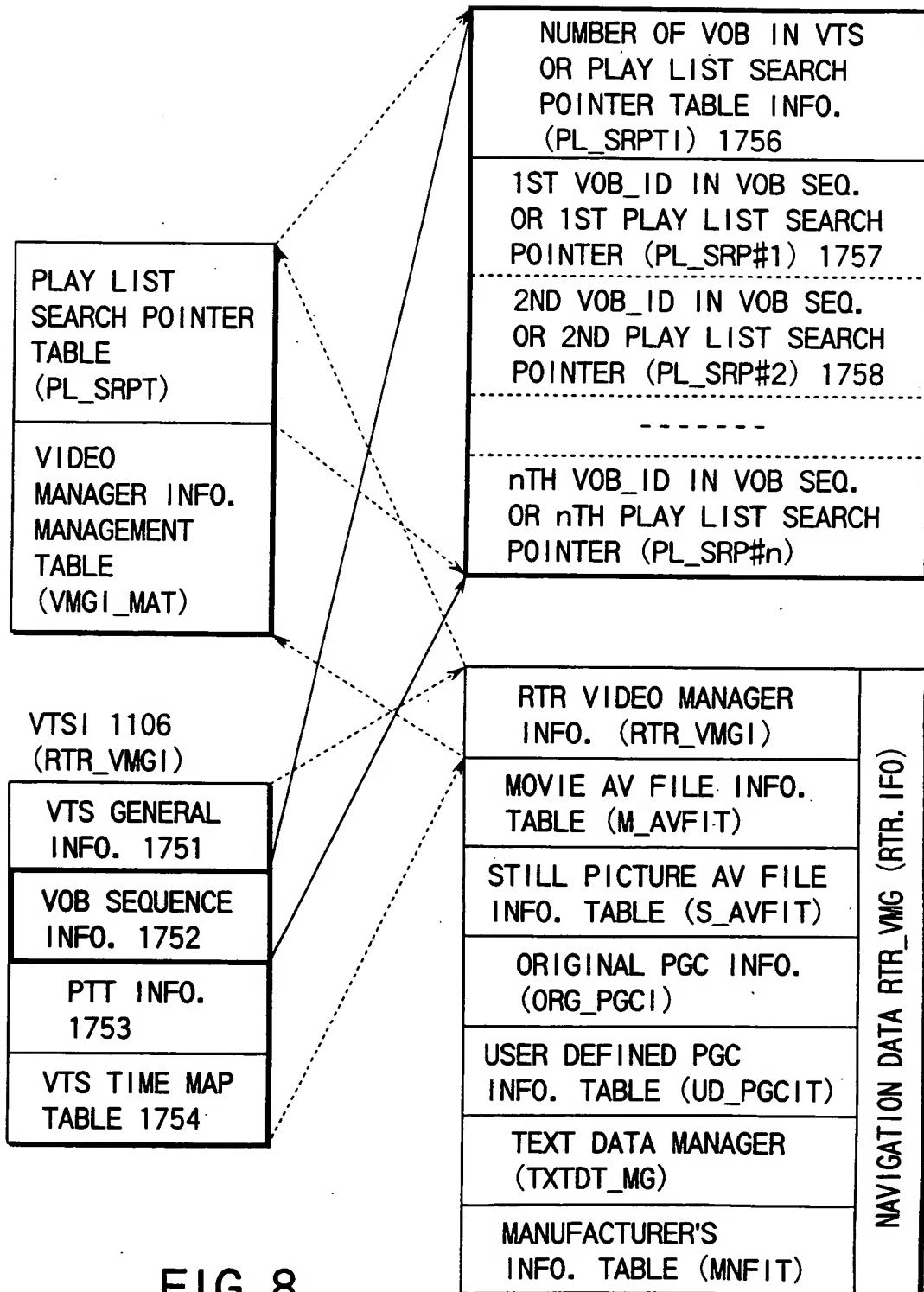


FIG. 9A

AV FILE 1401



FIG. 9B

VTS (OR RTR_MOV. VR0) 1402



FIG. 9C

VOB#1 1461	VOB#2 1462	VOB#3 1763	UNRECORDED AREA 1460
EXTENT# α 1471	EXTENT# β 1472	EXTENT# γ 1473	EXTENT# δ 1474

FIG. 9D

AV FILE 1401

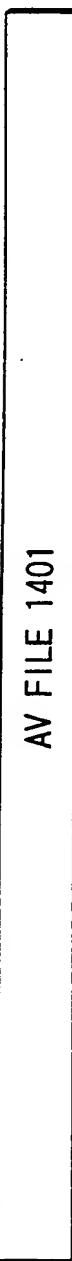


FIG. 9E

VTS (OR RTR_MOV. VR0/RTR_ST0. VR0/RTR_STA. VR0) 1402

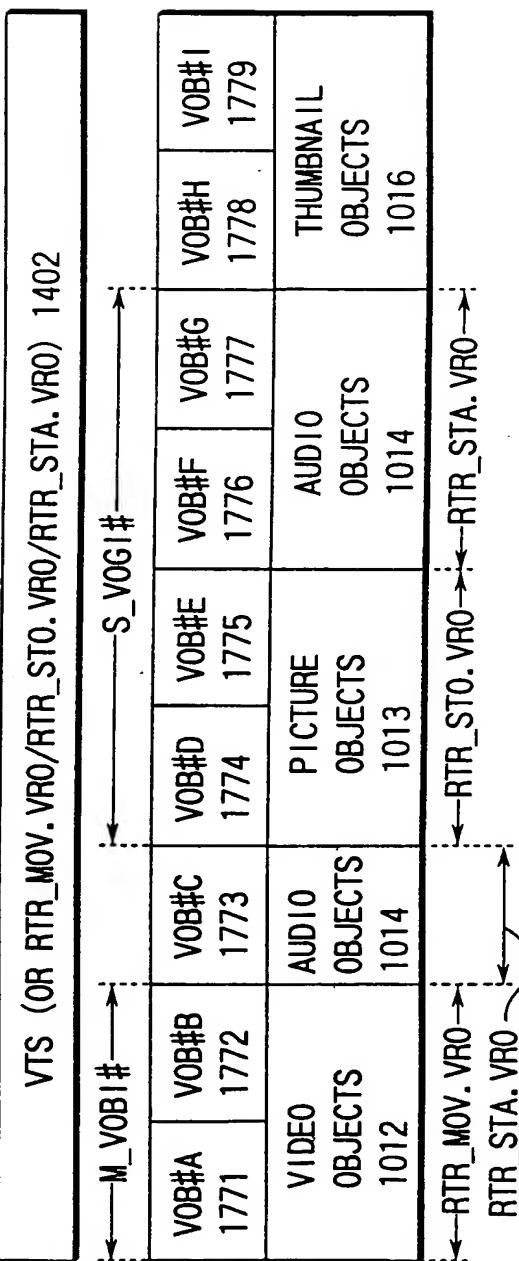
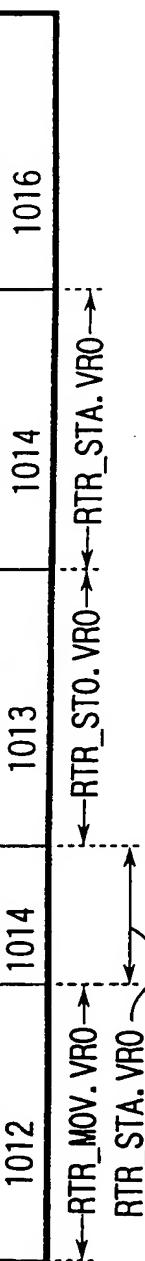


FIG. 9F



VOB FOR PICTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1631

FIG. 10B VOBU (FOR ONE STILL PICTURE) 1641

V_PCK 1661	V_PCK 1662	V_PCK 1663	SP_PCK 1681	A_PCK 1691	A_PCK 1692
I_PICTURE	1706	DUMMY DATA	SP_STREAM	A_STREAM	A_STREAM



VOB FOR PICTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1632

FIG. 10E VOBUs (ONE STILL PICT.) 1642 VOBUs 1643 ----- VOBUs 1644

V_PCK 1664	SP_PCK 1682	A_PCK 1693	V_PCK 1665	A_PCK 1694	V_PCK 1666	V_PCK 1667	A_PCK 1695
---------------	----------------	---------------	---------------	---------------	---------------	---------------	---------------

FIG. 10G VOB FOR PICTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1633

FIG. 10H VOBU (ONE STILL PICTURE) 1645

VOBU 1646

VOBU 1647

V_PCK 1668	V_PCK 1669	V_PCK 1670	SP_PCK 1683	V_PCK 1671	V_PCK 1672	V_PCK 1673	V_PCK 1674	V_PCK 1674
I-PICTURE 1707	DUMMY 1704	SP_STREAM	I-PICTURE 1708	DUMMY 1705			I-PICTURE 1709	



FIG. 10J VOB FOR PICTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1634

FIG. 10K VOBU (ONE STILL PICTURE) 1648

VOBU 1649

VOBU 1650

SP_PCK 1684	A_PCK 1696	A_PCK 1697	A_PCK 1698	A_PCK 1699	A_PCK 1700	A_PCK 1701	A_PCK 1702	A_PCK 1702



10026227.021002

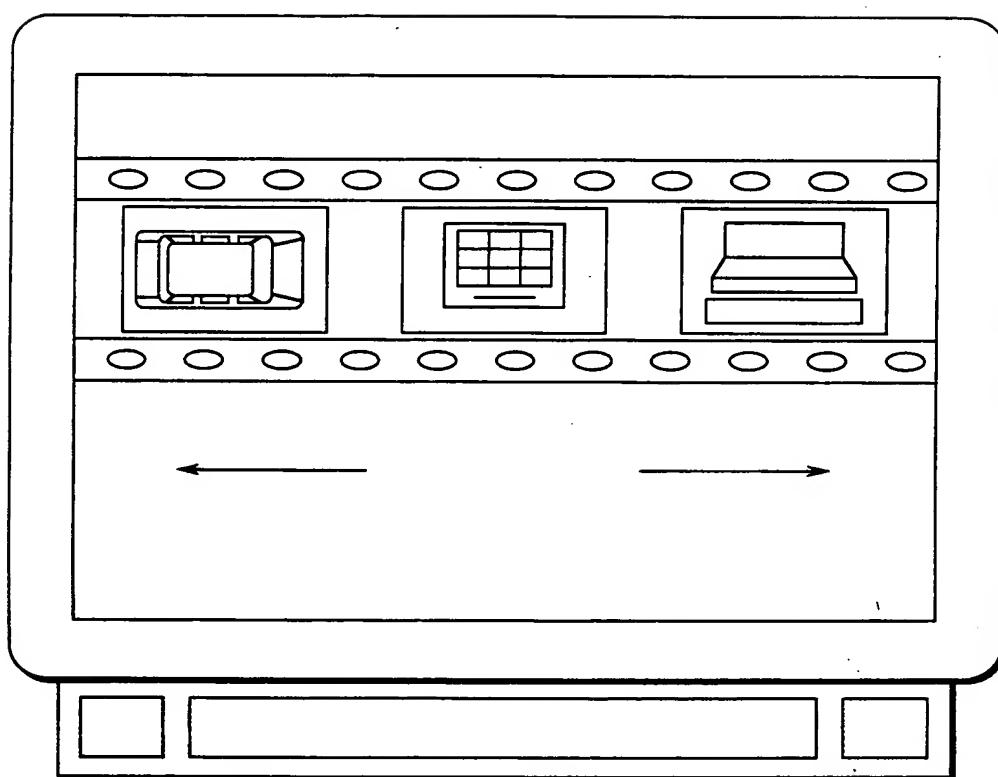


FIG. 11

SEARCHED - INDEXED - SERIALIZED - FILED

STILL PICTURE AV FILE (S_AVFIT)	VOB INFO. FOR PICT. OBJECTS MANAGEMENT INFO. 1721 (OR S_AVFI_G1)	VOB GENERAL INFORMATION FOR PICTURE OBJECTS 1736 (OR STILL PICTURE VOB GROUP GENERAL INFO. S_VOG_G1)
STILL PICTURE AV FILE INFO. TABLE INFO. (S_AVFITI)	SEARCH POINTER OF VOB INFO. FOR PICT. OBJECTS #1 1726 (OR S_VOGI_SRP#1)	VOB ATTRIB. INFORMATION FOR PICTURE OBJECTS 1737
STILL PICT. VOB STREAM INFO. #1 (S_VOB_STI#1)	SEARCH POINTER OF VOB INFO. FOR PICT. OBJECTS #i 1727 (OR S_VOGI_SRP#i)	VOBU MAP FOR PICTURE OBJECTS 1738 (OR STILL PICTURE VOB ENTRES S_VOB_ENT#)
-----	-----	-----
STILL PICT. VOB STREAM INFO. #n (S_VOB_STI#n)	SEARCH POINTER OF VOB INFO. FOR PICT. OBJECTS #i 1727 (OR S_VOGI_SRP#i)	-----
STILL PICTURE AV FILE INFO. (S_AVFI)	-----	-----
STILL PICT. AD- DITIONAL AUDIO STREAM INFO. #1 (S_AA_STI#1)	SEARCH POINTER OF VOB INFO. FOR PICT. OBJECTS #k 1728 (OR S_VOGI_SRP#k)	-----
-----	VOB INFO. FOR PICT. OBJECTS #1 1731 (OR S_VOGI#1)	-----
STILL PICT. AD- DITIONAL AUDIO STREAM INFO. #m (S_AA_STI#m)	VOB INFO. FOR PICT. OBJECTS #i 1732 (OR S_VOGI#i)	-----
STILL PICTURE ADDITIONAL AUDIO FILE INFO. (S_AAFI)	-----	-----
	VOB INFO. FOR PICT. OBJECTS #k 1733 (OR S_VOGI#k)	

FIG.12 #i=ANY ONE OF #1 TO #k

VOB ATTRIB. INFO. FOR PICT. OBJ. 1737	STILL PICT. ENTRY TYPE (S_VOB_ENT_TY)	DATA SIZE OF STILL PICTURE (OR VOBU) INDICATED BY USED SECTORS 1806 (OR VIDEO PART SIZE V_PART_SZ/ AUDIO PART SIZE A_PART_SZ)
VOBU MAP FOR PICT. OBJ. 1738 (S_VOB_ENT#)	NUMBER OF STILL PICT. (OR NUMBER OF VOBUs) IN CORRESPONDING VOB 1801 (OR S_VOB_Ns)	DISPLAY TIME OF ONE STILL PICTURE 1807 REPRESENTED BY PLAYBACK TIME OF AUDIO PART (IF VOBU CONTAINS A_PCK) OR REPRESENTED BY DISPLAY TIME OF VIDEO PART (IF VOBU CONTAINS NO A_PCK)
VOB GENERAL INFO. 1736 OR S_VOG_GI	INFO. OF 1ST STILL PICT. IN CORRESPONDING VOB 1802	ADDRESS OF 1ST V_PCK IN VOBU 1808 (OR S_VOG_SA)
	INFO. OF 2ND STILL PICT. IN CORRESPONDING VOB 1803	SIZE OF I-PICTURE IN VOBU (INDICATED BY TOTAL BYTES) 1809
	INFO. OF 3RD STILL PICT. IN CORRESPONDING VOB 1804	PRESENTATION START TIME S_PTM OF STILL PICTURE (V_PCK/SP_PCK) 1810
	1ST SYSTEM CLOCK REFERENCE F_SCR OF STILL. PICTURE (V_PCK/SP_PCK) 1811
		ADDRESS OF 1ST A_PCK IN VOBU 1812
		AUDIO S_PTM (PRESENTATION START TIME OF A_PCK) 1813
		AUDIO E_PTM (PRESENTATION END TIME OF A_PCK) 1814
		AUDIO F_SCR (SYSTEM CK REF. OF 1ST A_PCK IN VOBU) 1815
		AUDIO L_SCR (SYSTEM CK REF. OF LAST A_PCK IN VOBU) 1816

PLAYBACK TIME
OF AUDIO PART
A_PB_TM

FIG. 13

4002222-0004002

FIG. 14A

VOB #A 1821					
VOBU 1825		VOBU 1826		VOBU 1827	
STILL PICT. NO. 1		STILL PICT. NO. 2		STILL PICT. NO. h	

FIG. 14B

STLPCT	AUDIO	STLPCT	AUDIO	STLPCT	AUDIO
1831	1841	1832	1842	1833	1843
V_PCK	A_PCK	V_PCK	SP_PK	A_PCK	V_PCK

FIG. 14C

STLPCT	AUDIO	STLPCT	AUDIO	STLPCT	AUDIO
1831	1841	1832	1842	1833	1843
V_PCK	A_PCK	V_PCK	SP_PK	A_PCK	V_PCK

FIG. 14C

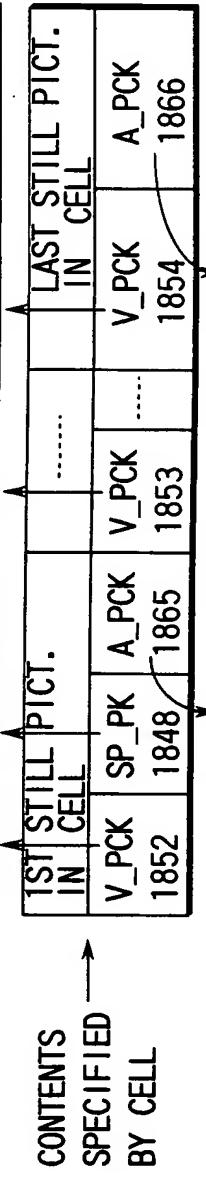


FIG. 14D

STLPCT	AUDIO	STLPCT	AUDIO	STLPCT	AUDIO
1831	1841	1832	1842	1833	1843
V_PCK	A_PCK	V_PCK	SP_PK	A_PCK	V_PCK

FIG. 14E

STLPCT	AUDIO	STLPCT	AUDIO	STLPCT	AUDIO
1831	1841	1832	1842	1833	1843
V_PCK	A_PCK	V_PCK	SP_PK	A_PCK	V_PCK

FIG. 14F

STLPCT	AUDIO	STLPCT	AUDIO	STLPCT	AUDIO
1831	1841	1832	1842	1833	1843
V_PCK	A_PCK	V_PCK	SP_PK	A_PCK	V_PCK

STLPCT	AUDIO	STLPCT	AUDIO	STLPCT	AUDIO
1831	1841	1832	1842	1833	1843
V_PCK	A_PCK	V_PCK	SP_PK	A_PCK	V_PCK

FIG. 14G

CONTENTS (S_CI) OF CELL PLAYBACK INFO. (CI) FOR PICTURE OBJECTS 1870	EXAMPLE 1871 WITH RESPECT TO FIG.14	EXAMPLE 1872 WITH RESPECT TO FIG.14
CELL ID (CI_SR) 1873	_____	_____
TYPE INFORMATION OF CELL (C_TY) 1880	_____	_____
ID INFORMATION OF VOB WITH V_PCK 1874	VOB #A	1821
STILL PICT. NUMBER 1875 IN VOB INCLUDING V_PCK OF 1ST STILL PICTURE IN CELL (S_S_VOB_ENTN)	2	1826
STILL PICT. NUMBER 1876 IN VOB INCLUDING V_PCK OF LAST STILL PICTURE IN CELL (E_S_VOB_ENTN)	h	1827
ID INFORMATION OF VOB WITH A_PCK 1877	VOB #B	1822
STILL PICT. NUMBER 1878 IN VOB INCLUDING A_PCK OF 1ST STILL PICTURE IN CELL	j	1828
PRESENTATION TIME 1879 OF EACH STILL PICTURE HAVING NO CORRESPONDING A_PCK	2 SECONDS (ONE LINE)	_____

FIG.15

20076277-0001-0000

CONTENTS OF CELL PLAYBACK INFO. (CI) FOR PTT
CELL ID (CI_SRP) 1883
TYPE INFO. OF CELL (C_TY) 1882
ID INFO. OF PTT WITH V_PCK 1884
STILL PICTURE NUMBER 1885 IN PTT OF VOB INCLUDING V_PCK OF 1ST STILL PICTURE IN CELL
STILL PICTURE NUMBER 1886 IN PTT OF VOB INCLUDING V_PCK OF LAST STILL PICTURE IN CELL
ID INFO. OF PTT WITH A_PCK 1887
STILL PICTURE NUMBER 1888 IN PTT OF VOB INCLUDING A_PCK OF 1ST STILL PICTURE IN CELL
PRESENTATION TIME 1889 OF EACH STILL PICT. HAVING NO CORRESPONDING A_PCK

FIG. 16

STILL PICTURE AV FILE INFO.
(S_AVFI) FOR PTT (CHAPTER)

TOP SECRET//COMINT

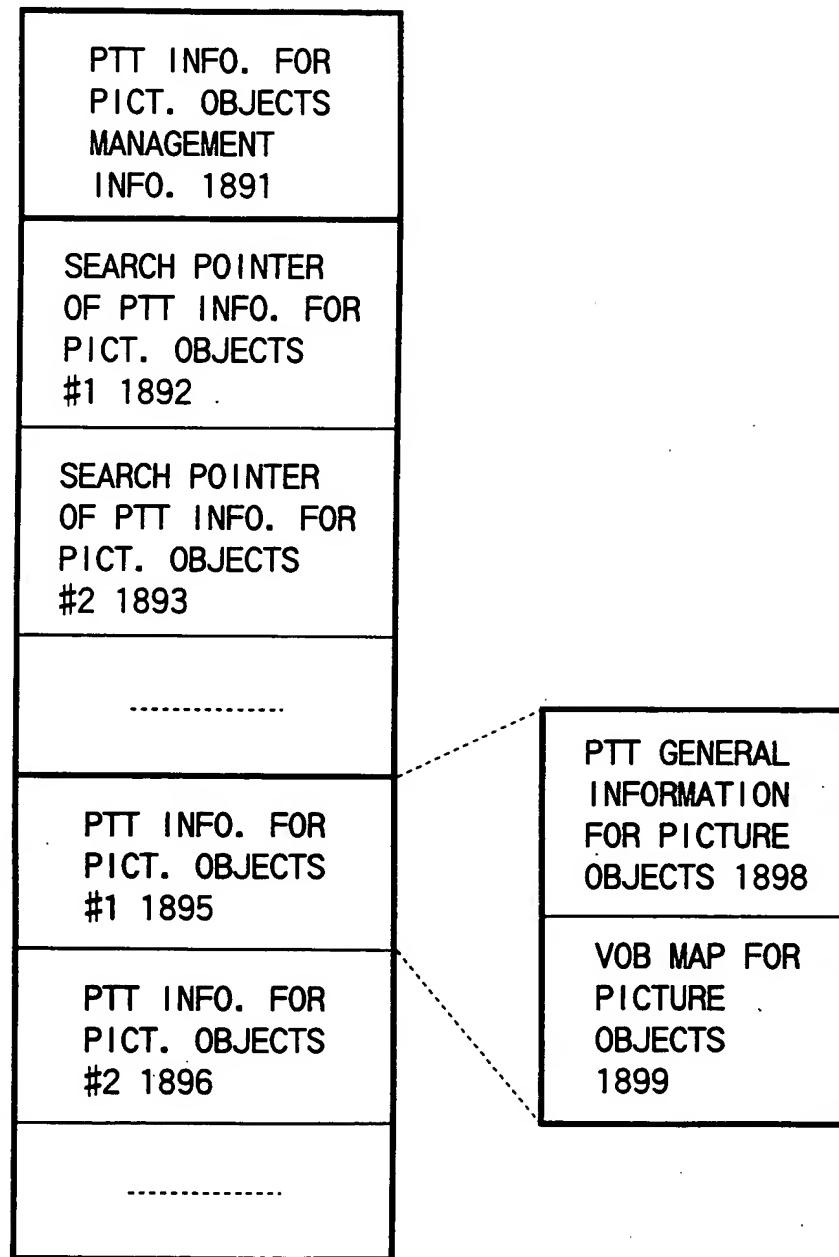


FIG. 17

2003-33997-22400

VOB MAP FOR
PICT. OBJECTS
1899

NUMBER OF
STILL PICT.
(OR NUMBER
OF VOBs) IN
CORRESPONDING
PTT 1901
(OR S_VOB_Ns)

INFO. OF 1ST
STILL PICT. IN
CORRESPONDING
PTT 1902

INFO. OF 2ND
STILL PICT. IN
CORRESPONDING
PTT 1903

FIG. 18

DATA SIZE OF STILL PICTURE
(OR VOB) INDICATED BY USED
SECTORS 1906

DISPLAY TIME OF ONE STILL
PICTURE 1907 REPRESENTED
BY PLAYBACK TIME OF AUDIO
PART (IF VOB CONTAINS
A_PCK) OR REPRESENTED BY
DISPLAY TIME OF VIDEO PART
(IF VOB CONTAINS NO A_PCK)

ADDRESS OF 1ST V_PCK
IN VOB 1908
(OR S_VOG_SA)

SIZE OF I-PICTURE IN VOB
(INDICATED BY TOTAL BYTES)
1909

PRESENTATION START TIME
S_PTm OF STILL PICTURE
(V_PCK/SP_PCK) 1910

1ST SYSTEM CLOCK REFERENCE
F_SCR OF STILL. PICTURE
(V_PCK/SP_PCK) 1911

ADDRESS OF 1ST A_PCK
IN VOB 1912

AUDIO S_PTm (PRESENTATION
START TIME OF A_PCK) 1913

AUDIO E_PTm (PRESENTATION
END TIME OF A_PCK) 1914

AUDIO F_SCR (SYSTEM CK REF.
OF 1ST A_PCK IN VOB) 1915

AUDIO L_SCR (SYSTEM CK REF.
OF LAST A_PCK IN VOB) 1916

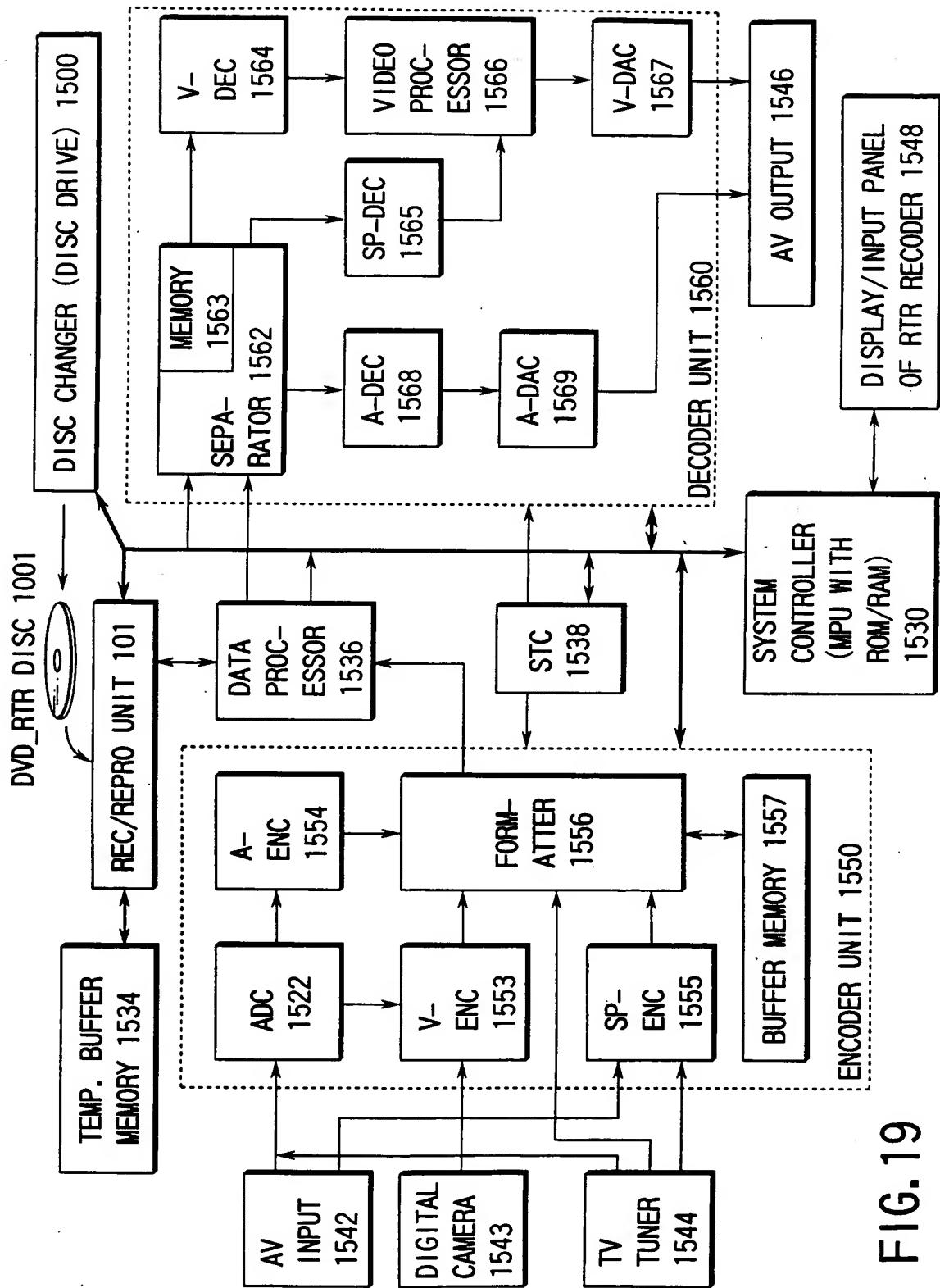


FIG. 19

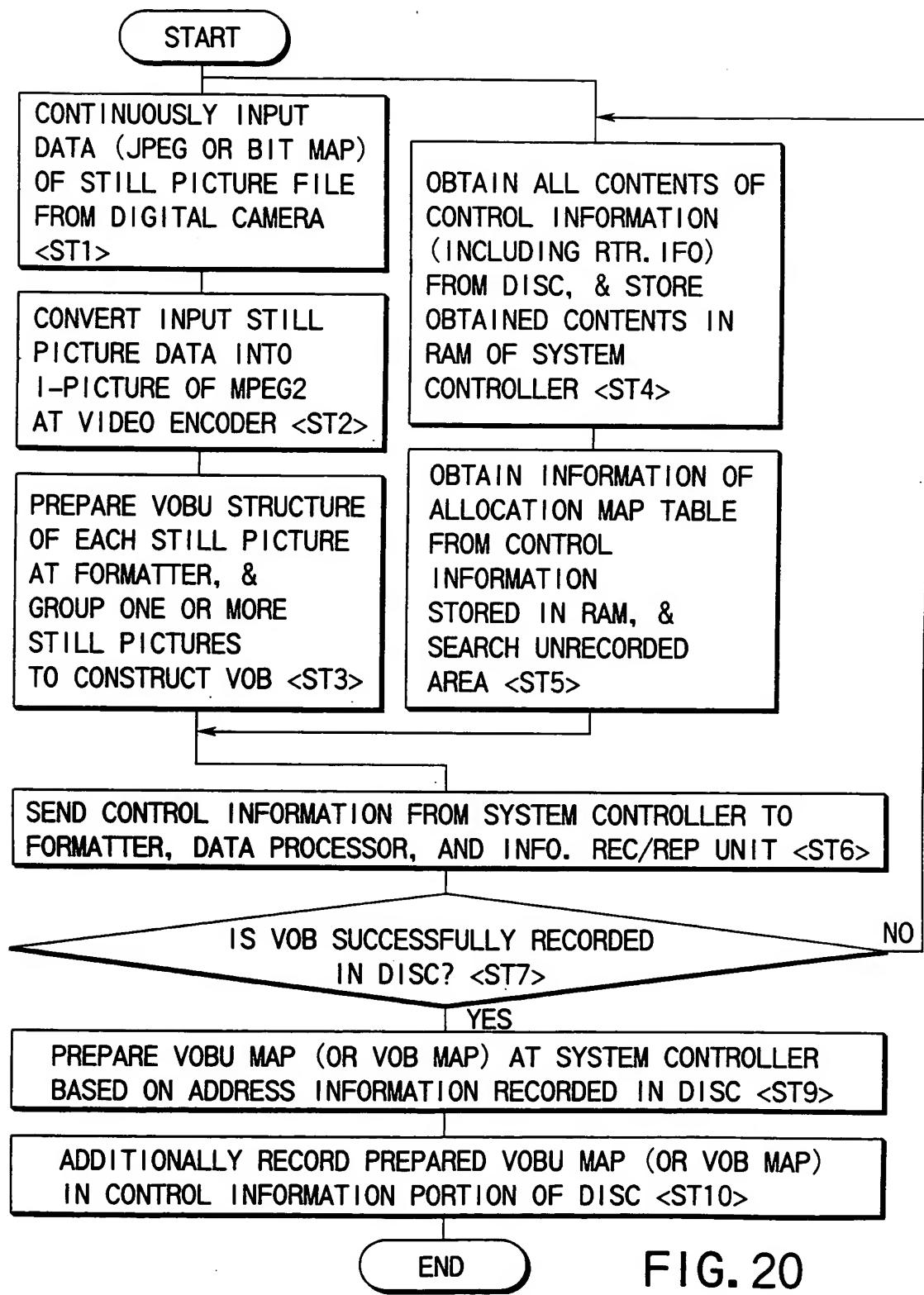


FIG. 20

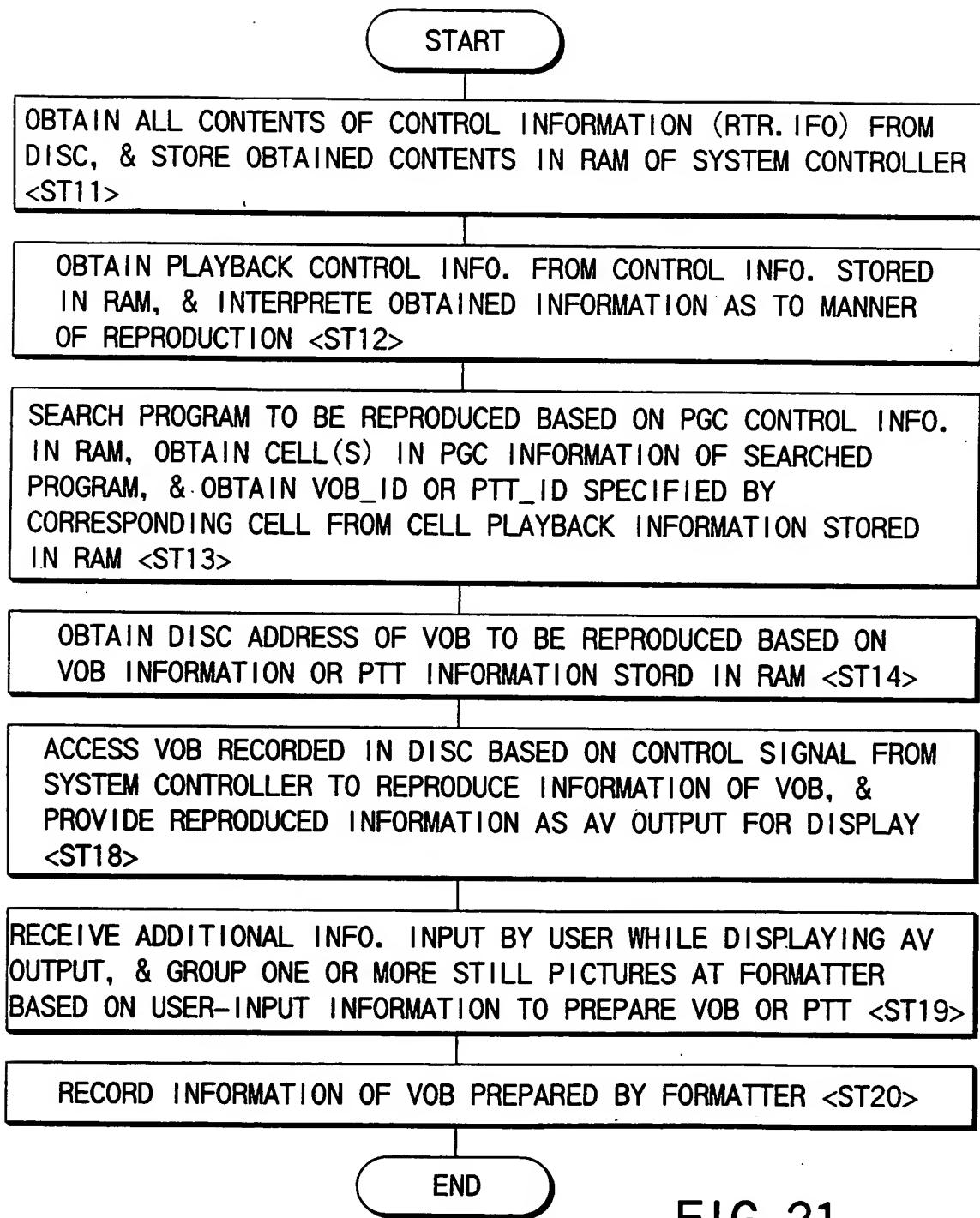


FIG. 21

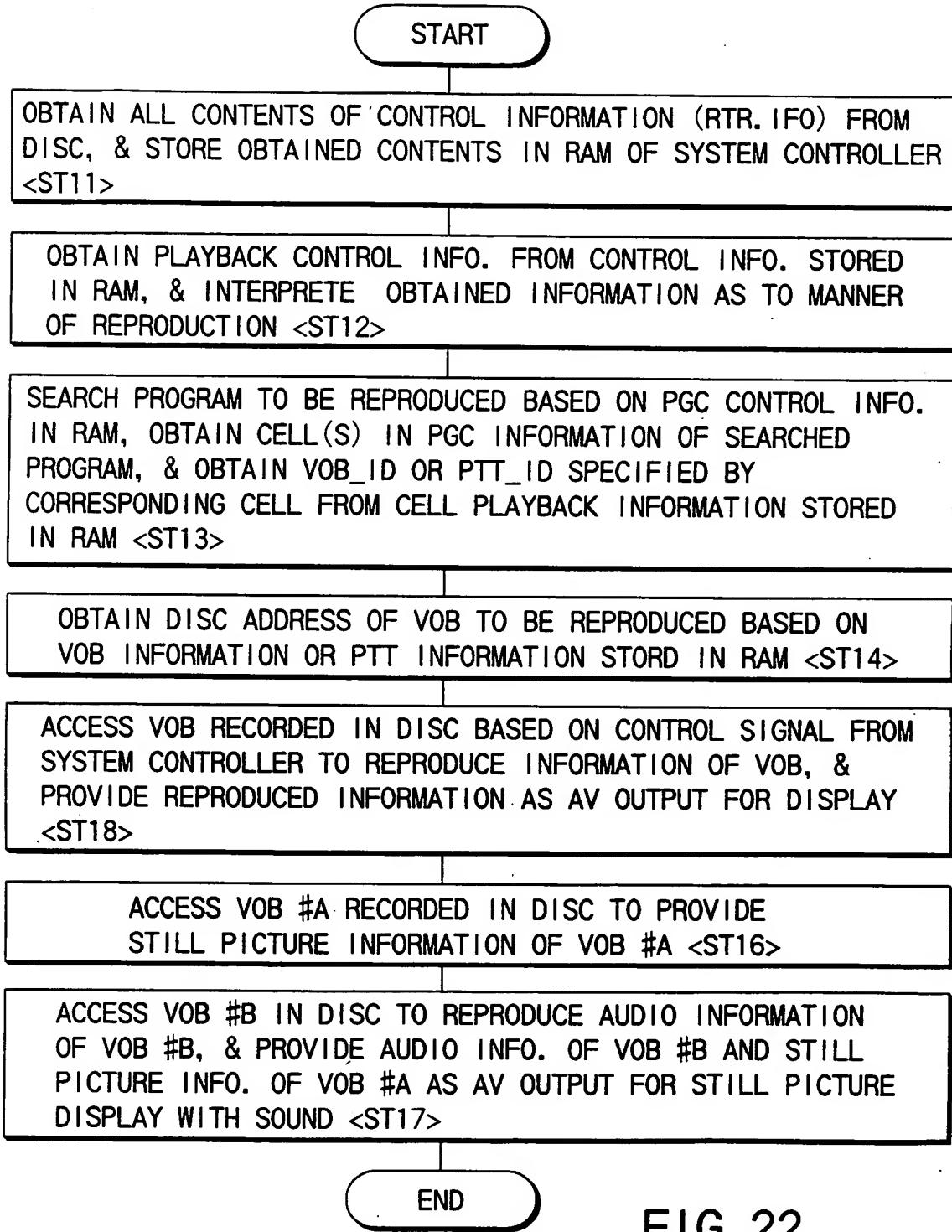


FIG. 22

2025 RELEASE UNDER E.O. 14176

RTR_VMG

RTR VIDEO MANAGER INFO. (RTR_VMG1)
MOVIE AV FILE INFO. TABLE (M_AVFIT)
STILL PICTURE AV FILE INFO. TABLE (S_AVFIT)
ORIGINAL PGC INFORMATION (ORG_PGC1)
USER DEFINED PGC INFORMATION TABLE (UD_PGCIT)
TEXT DATA MANAGER (TXTDT_MG)
MANUFACTURER'S INFO. TABLE (MNFIT)

USER DEFINED PGC INFO. TABLE
INFORMATION (UD_PGCIT1)

USER DEFINED PGC1 SEARCH
POINTER #1 (UD_PGC1_SRP#1)

USER DEFINED PGC1 SEARCH
POINTER #n (UD_PGC1_SRP#n)

USER DEFINED PGC INFO. #1
(UD_PGC1#1)

USER DEFINED PGC INFO. #n
(UD_PGC1#n)

CONTENTS OF PGC1 (ORIGINAL
PGC1 OR USER DEFINED PGC1)

PGC INFORMATION #i (PGC1#i)

PGC GENERAL INFO. (PGC_G1)

PROGRAM INFO. #1 (PG1#1)

PROGRAM INFO. #m (PG1#m)

CELL INFO. SEARCH POINTER #1
(CI_SRP#1)

CELL INFO. SEARCH POINTER #n
(CI_SRP#n)

CELL INFO. #1 (CI#1)

CELL INFO. #n (CI#n)

START ADDRESS OF
CELL INFO. (CI_SA)

MOVIE CELL INFO.
(M_CI)

OR

STILL PICTURE
CELL INFO. (S_CI)

FIG. 23

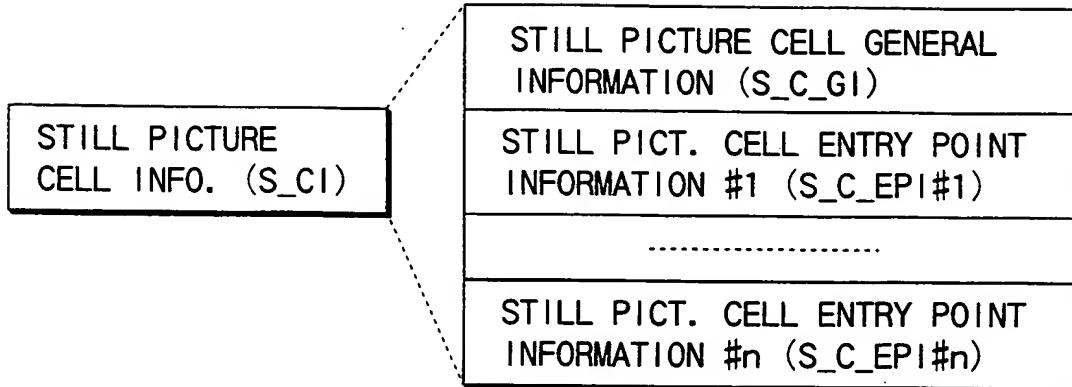


FIG. 24

CONTENTS OF S_C_GI

FIELD NAME	CONTENTS
RESERVED	RESERVED
C_TY	CELL TYPE
S_VOGI_SRPN	S_VOGI SEARCH POINTER NUMBER
C_EPI_Ns	NUMBER OF CELL ENTRY POINT INFO.
S_S_VOB_ENTN	START S_VOB_ENT NUMBER
E_S_VOB_ENTN	END S_VOB_ENT NUMBER

FIG. 25

CONTENTS OF S_C_EPI

FIELD NAME	CONTENTS
EP_TY	ENTRY POINT TYPE
S_VOB_ENTN	S_VOB_ENT NUMBER
PRM_TXTI	PRIMARY TEXT INFORMATION

FIG. 26

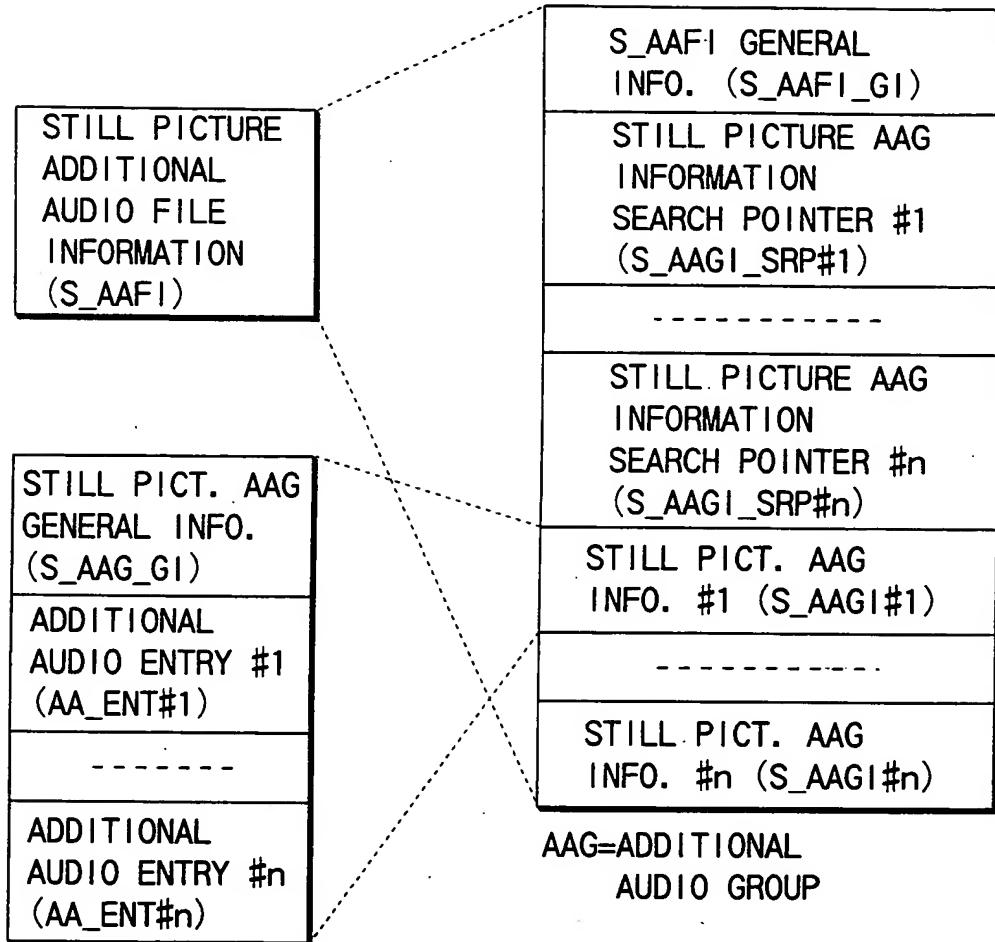


FIG. 27

CONTENTS OF S_AAG_G1

FIELD NAME	CONTENTS
AA_ENT_Ns	NUMBER OF AA_ENT
S_AA_STIN	STILL PICTURE ADDITIONAL AUDIO STREAM INFORMATION NUMBER
S_AAG_SA	START ADDRESS OF THIS AAG IN STILL PICTURE ADDITIONAL AUDIO FILE

FIG. 28

CONTENTS OF AA_ENT

FIELD NAME	CONTENTS
AA_TY	ADDITIONAL AUDIO TYPE
AA_SZ	SIZE OF ADDITIONAL AUDIO STREAM
AA_PB_TM	PLAYBACK TIME OF ADDITIONAL AUDIO STREAM (MEASURED BY VIDEO FIELDS)

FIG. 29

CONTENTS OF S_VOG_G1

FIELD NAME	CONTENTS
S_VOB_Ns	NUMBER OF S_VOBs
S_VOB_STIN	STILL PICTURE VOB STREAM INFORMATION NUMBER
FIRST_VOB_REC_TM	TIME WHEN THE FIRST VOB IN THIS VOB GROUP WAS RECORDED
LAST_VOB_REC_TM	TIME WHEN THE LAST VOB IN THIS VOB GROUP WAS RECORDED
S_VOG_SA	START ADDRESS OF THIS VOB GROUP IN STILL PICTURE AV FILE

FIG. 30

CONTENTS OF S_VOB_ENT (TYPE 1)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART

FIG. 31

CONTENTS OF S_VOB_ENT (TYPE 2)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
A_PART_SZ	SIZE OF ORIGINAL AUDIO PART
A_PB_TM	PLAYBACK TIME OF AUDIO PART (DESCRIBED IN VIDEO FIELDS)

FIG. 32

CONTENTS OF S_VOB_ENT (TYPE 3)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
S_AAGN	ADDITIONAL AUDIO GROUP NUMBER
AA_ENTN	AA_ENT NUMBER

FIG. 33

CONTENTS OF S_VOB_ENT (TYPE 4)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
A_PART_SZ	SIZE OF ORIGINAL AUDIO PART
A_PB_TM	PLAYBACK TIME OF AUDIO PART
S_AAGN	ADDITIONAL AUDIO GROUP NUMBER
AA_ENTN	AA_ENT NUMBER

FIG. 34

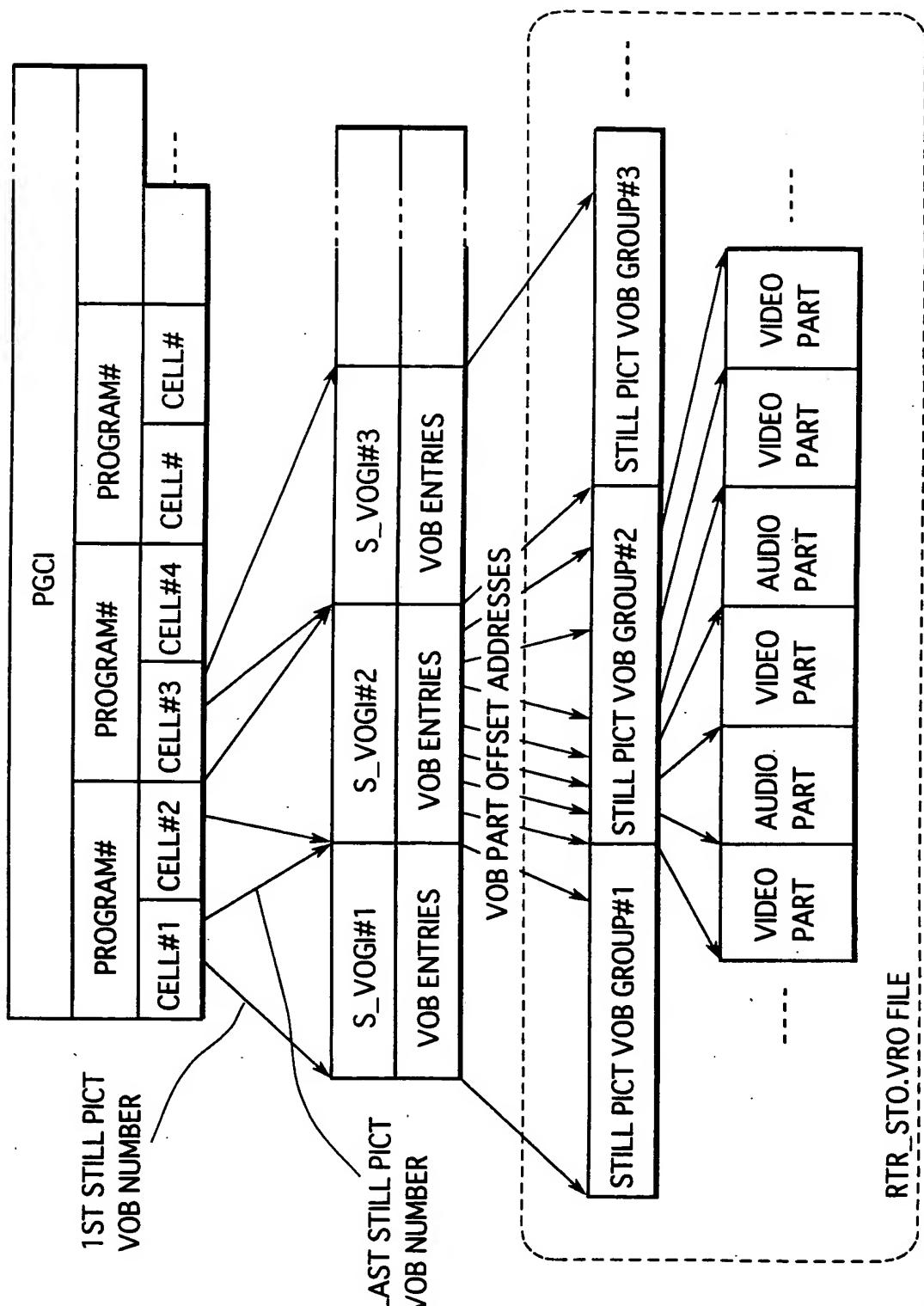


FIG. 35

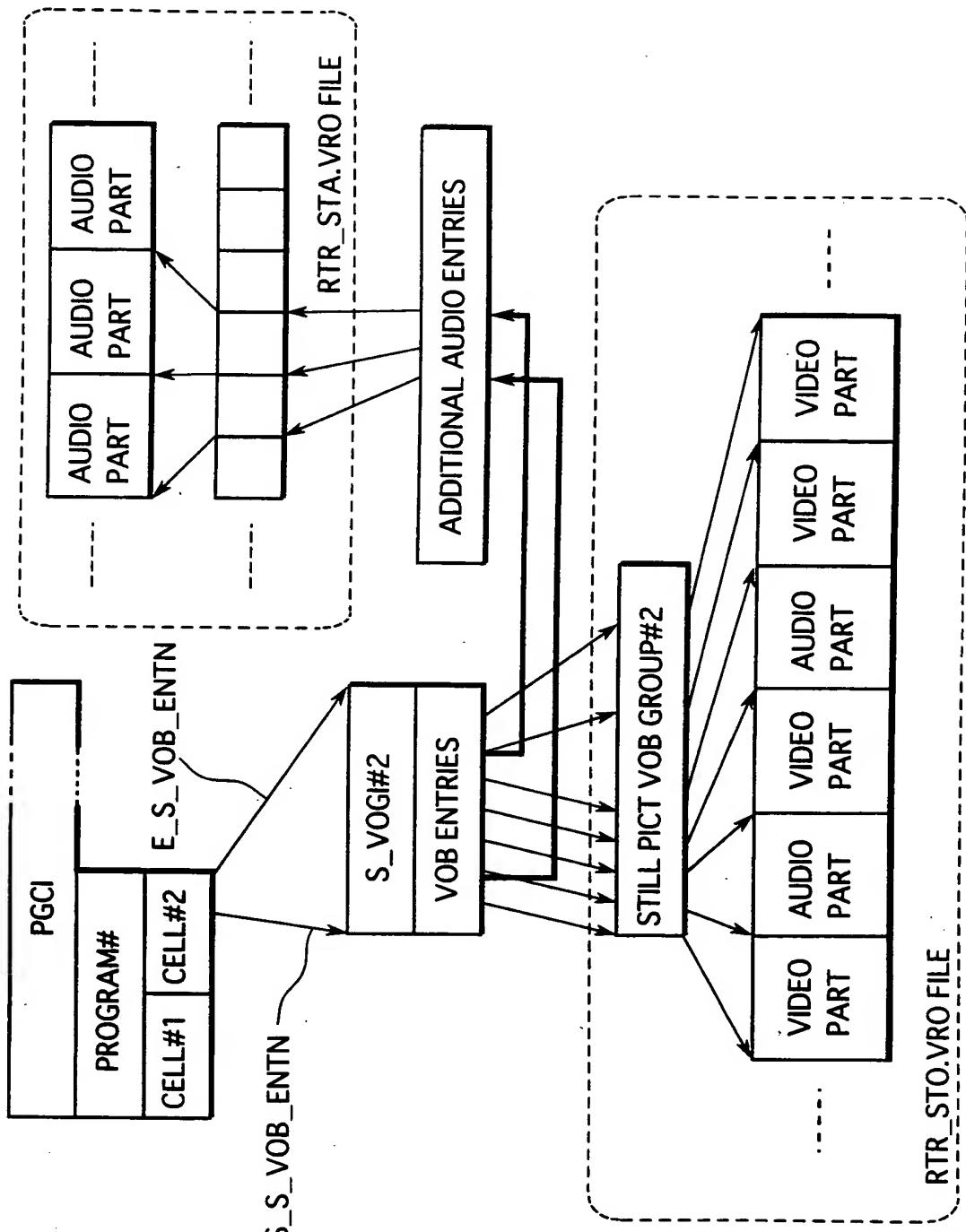


FIG. 36
RTR_STO.VRO FILE

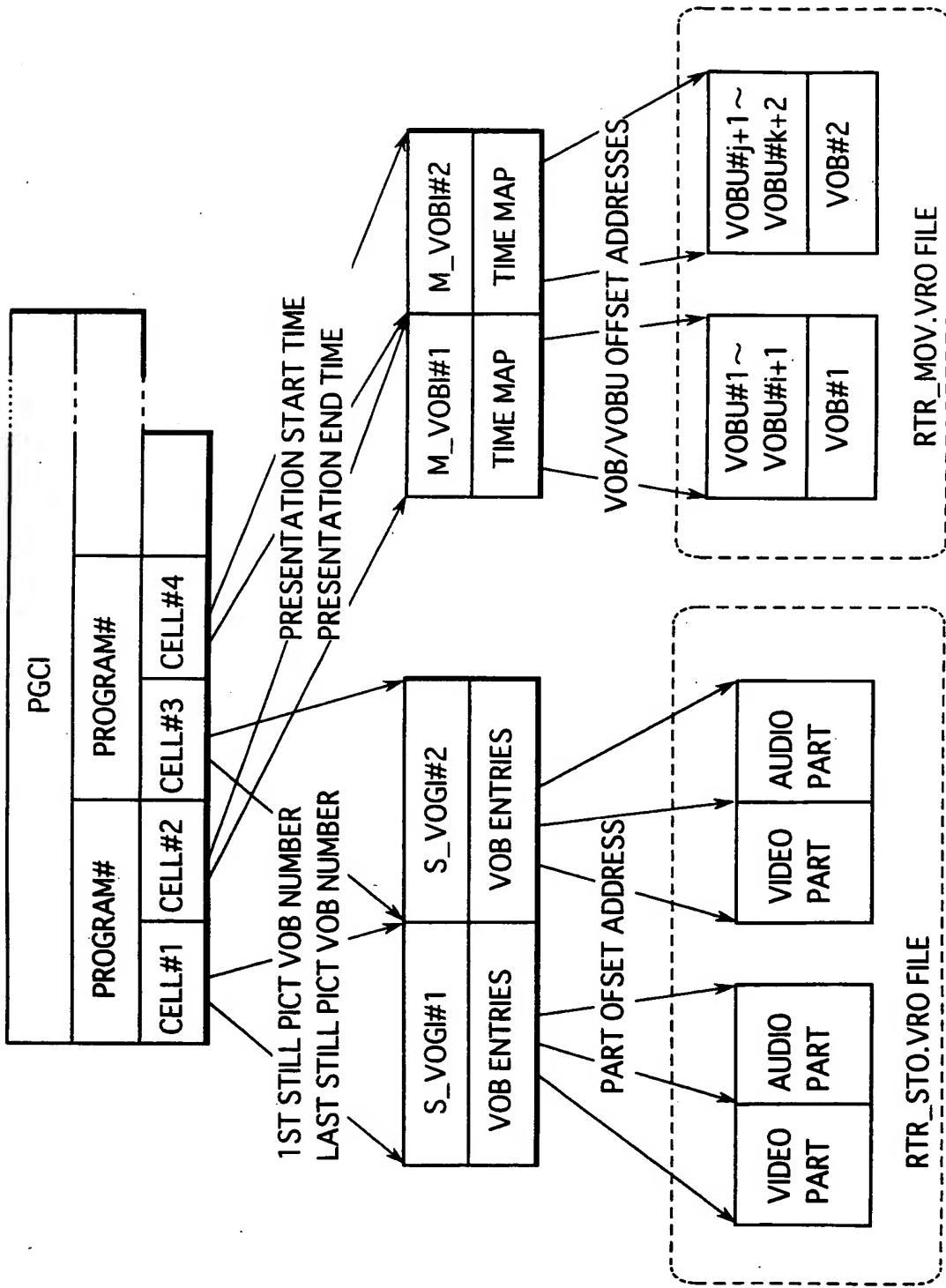


FIG. 37

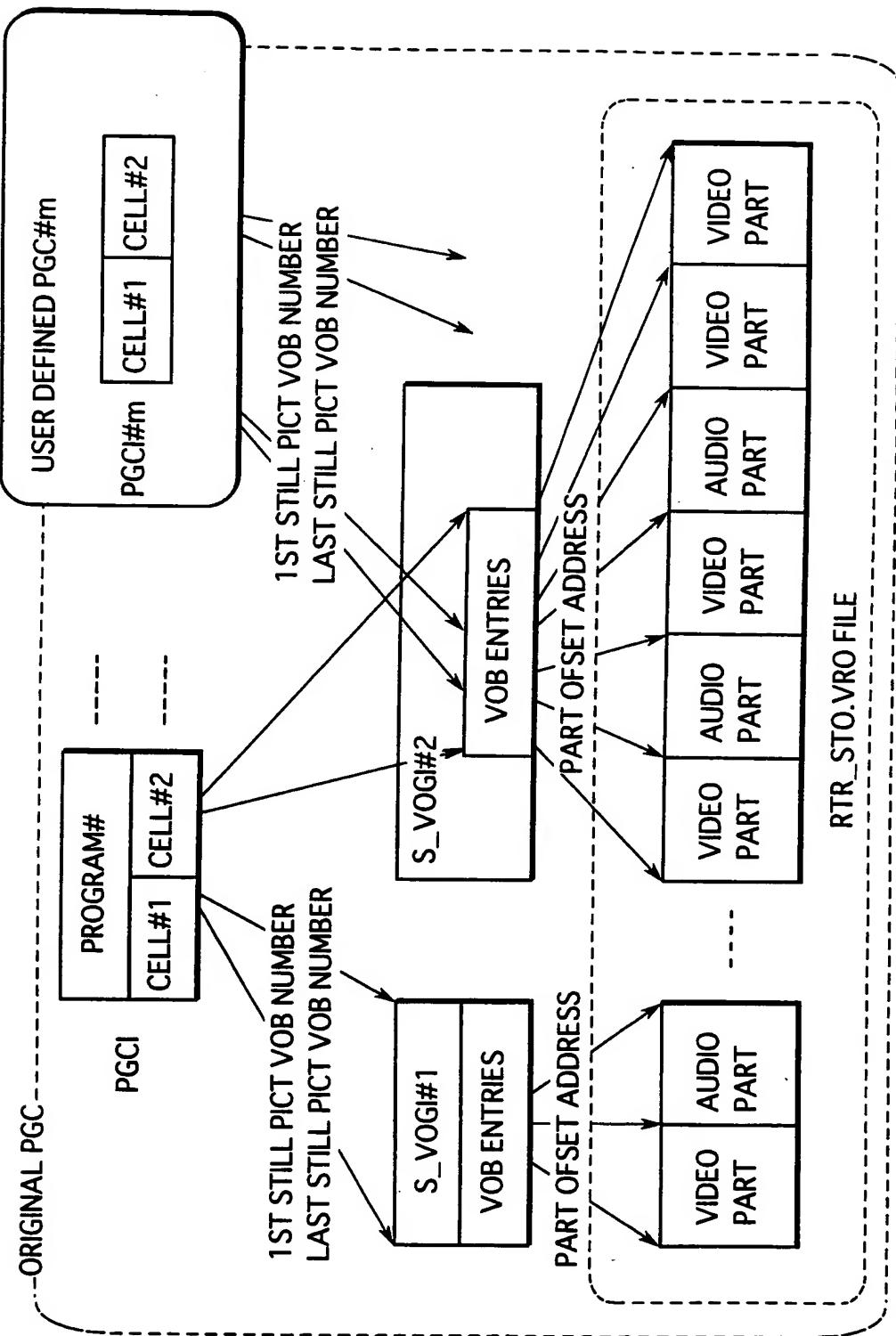


FIG. 38